

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002438**Date Inspected:** 18-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island

<b>CWI Name:</b>	Li Yan Hua	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG	

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to perform Visual Testing (VT) of the Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector performed visual inspection of OBG 19.995 meter deck panel DP246-001-001 (welds 001 through 009) U-rib Partial Joint Penetration (PJP) welds. Visual testing of welding was performed in accordance with contract documents. The following discontinuities were found during inspection on the Submerged Arc Welding (SAW) cover pass, incomplete fusion, overlap, undercut, underfill and oversize welds. Welding discontinuities were marked on deck panel with a permanent marker, length and Y location recorded. Visual Inspection results were distributed to the appropriate personnel for review. A summary of discontinuities on inspected U- rib PJP welds are listed below. Please see photo below of grinding area with Incomplete Fusion.

DP246-001

DP246-001-001, Incomplete Fusion 79 areas, Underfill 16 areas, and Overlap 6 areas

DP246-001-002, Incomplete Fusion 2 areas, Overlap 4 areas, and Underfill 14 areas.

DP246-001-003, Incomplete Fusion 31 areas, Underfill 6 areas, and Overlap 3 areas

DP246-001-004, Underfill 23 areas, Undercut 1 area, and Overlap 1 area

DP246-001-005, Incomplete Fusion 1 area, Underfill 13 areas, and Overlap 1 area

DP246-001-006, Incomplete Fusion 1 area, Underfill 21 areas, and Overlap 2 areas

DP246-001-007, Underfill 11 areas, and Overlap 5 areas

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

DP246-001-008, Incomplete Fusion 3 areas, Underfill 13 areas, and Overlap 3 areas

DP246-001-009, Incomplete Fusion 1 area, Underfill 13 areas, and Overlap 7 areas



### Summary of Conversations:

No relevant conversations occurred this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer

---